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FAR FROM THE EYES, CLOSE TO THE HEART? THE ATTITUDE OF KINDERGARTEN TEACHERS TO DISTANCE LEARNING IN KINDERGARTENS IN ISRAEL

INTRODUCTION

The COVID-19 crisis has forced the education system in Israel, like in many countries around the world, to shift to distance learning, including kindergartens. How does this work with the unique character of the kindergartens and the method of teaching in early childhood, which is based on the development of the child and his needs and emphasizes the experiential and sensory experience? What about the kindergarten teachers' training in technology?

The topic of whether distance learning is effective at young ages has risen to the public agenda and been discussed in the media. The opinions are divided. Some parents preferred for days to be returned at the end of the crisis, while other parents welcomed the distance learning and its contribution. There were also differences among kindergarten teachers: some welcomed distance learning and rapidly prepared for it, while others had difficulties and complained. The status of the kindergartens and kindergarten teachers as a framework for care and supervision of children when the parents can do their work intensified and in parallel many questions arose. What suits distance learning in early childhood and what does not? What is the kindergarten teachers' attitude towards distance learning at the age of the kindergarten, what can be learned from the extreme and sharp change that the crisis created?

Distance Learning

Moore¹ presented an initial definition as learning without boundaries of time and place. Over the years, different terms and definitions were created for the term

¹ M.G. Moore, *Theory of Transactional Distance*, [in:] *Theoretical Principles of Distance Education*, ed. D. Keegan, Routledge, London–New York 1993, p. 22–38.

of distance learning, including distance education, remote learning, and advanced distributed learning. Every concept addresses the way and medium in which the learning is performed. Today it is customary to define it as learning that links between a learner and a teacher who are not in the same place, in which independence, responsibility, and literacy are required². The Ministry of Education website³ defines distance learning as learning that is made possible through technology for the management of learning and teaching processes in an online environment free of the bounds of space and time. It enables an approach to students and teachers from around the world and proposes innovative methods of learning tailored to learners in terms of pace of learning, areas of interest, and abilities and exposure in parallel to the diverse materials and different content sites. It can be adjusted to the community of learners in groups of different sizes and according to levels, enables the educator to diversify in ways of teaching through the use of digital tools and diverse and actual multimedia applications, and is adjusted to the characteristics of the era⁴.

It is possible to understand from this definition that the Ministry of Education in Israel addresses distance learning primarily as online learning. Most of the research studies conducted in Israel and around the world on online learning focused on students in higher education and upper classes, and it was not used in the elementary grades and certainly not in the kindergarten classes. These studies found that there is great satisfaction among students with online learning. When research studies that compare between frontal learning and digital learning are considered, the tendency for better results in digital learning is apparent⁵. In an integrative review on e-learning carried out in Copenhagen University⁶, with the aim of understanding how it is possible to measure e-learning and whether it is possible to compare it to traditional learning, two main variables arise – the learner's motivation and interaction and interest. The engagement in the learner's and the teacher's motivation in distance learning is discussed also by Salant⁷, who as-

² Michlol Jewish Encyclopedia, *Distance Learning*, 2018 [online], <<https://www.hamichlol.org.il/>> [dostep: 31.12.2020].

³ Ministry of Education, *The Educational Cloud: All the Online Computerized Services for the School*, July 19, 2020 [online], <https://sites.education.gov.il/cloud/home/Lemida_Merahok/Pages/harchava_lmida_merachok.aspx> [dostep: 31.12.2020].

⁴ Ministry of Education, *The Educational Cloud: All the Online Computerized Services for the School*, July 19, 2020 [online], <https://sites.education.gov.il/cloud/home/Lemida_Merahok/Pages/harchava_lmida_merachok.aspx> [dostep: 31.12.2020].

⁵ E. Salant, *Knowledge and Digital Curiosity Website*, April 6, 2020.

⁶ S. Noesgaard, R. Ørngreen, *The Effectiveness of E-Learning: An Explorative and Integrative Review of the Definitions, Methodologies and Factors That Promote e-Learning Effectiveness*, "Electronic Journal of e-Learning" 2015, 13 (4), p. 278–290.

⁷ E. Salant, *Factors of Motivation of Students and Teachers in the Distance Learning System*, *Studies in Technology and Sciences*, "Journal of Technological-Scientific Education" 2001, p. 7–11.

serts that the teacher's authority is reduced and at the same time the student is required to have greater self-discipline. In the cases of students lacking motivation, it is harder for the teacher to follow up and change and in distance learning there is less solidarity and understanding of students with difficulties on the part of their friends. A research⁸ carried out in Taiwan for students and lecturers shows that the students expressed satisfaction with the method of learning while the lecturers were less satisfied. Thalheimer⁹ reviews a range of research studies that address satisfaction and comparison between online learning and traditional learning and notes that online learning has an advantage. He emphasizes that the highest satisfaction is presented by researches on combined learning, traditional and online. Another research¹⁰ that examined the lecturer's preferences for online learning or traditional learning indicates that students and teachers experience synchronous learning as sociable, like face-to-face learning in the classroom. Despite the experience of the teachers participating in the research in synchronous teaching, they prefer traditional teaching since they feel a lack of technological knowledge. The teachers' mastery of three types of knowledge is required, content, pedagogy, and technology, as well as the combination between them. A positive significant relationship was found between the students' functioning and experience in an online computerized environment¹¹. It was further found that many of those distance teaching transfer the previous didactic models that were developed in traditional learning to the Internet space, and the lack of consonance between the technological platform and the didactics creates frustration and necessitates the learning of tools and current and interesting interactive solutions¹².

There is another aspect: distance learning does not suit everyone. A research¹³ indicated that students with liberal thinking style and students with internalized thinking style functioned better in an online course and found a significant posi-

⁸ L. Ching-Hong, *The Comparison of Learning Effectiveness between Traditional Face-To-Face Learning and E-Learning among Goal-Oriented Users*, 6th International Conference on Digital Content, Multimedia Technology and its Applications, Seoul 2010, p. 255–260.

⁹ W. Thalheimer, *Does eLearning Work? What The Scientific Research Says!*, Work-Learning Research Inc. Somerville, Massachusetts, USA 2017 [online], <<https://web.archive.org/web/20180329101642/http://willthalheimer.typepad.com:80/files/does-elearning-work-full-research-report-final.pdf>> [dostęp: 31.12.2020].

¹⁰ S. Keren, G. Kurtz, *Face-to-Face versus Online Synchronous Teaching: Attitudes of Practiced Teachers*, Holon Technological Institute, 2020 [online], <https://www.openu.ac.il/lists/media-server_documents/innovation/chais/2020/b1_2.pdf> [dostęp: 31.12.2020].

¹¹ Ibidem.

¹² A. Chickering, S. Ehrmann, *Implementing the Seven Principles: Technology as Lever*, 1996 [online], <<http://www.tlgroup.org/programs/seven>> [dostęp: 31.12.2020].

¹³ N. Shany, R. Nachmias, *Virtual Course – For Whom?*, “Studies in Technology and Sciences” 2001, 34, p. 26–29.

tive relationship between the students' functioning and the degree of experience they had in work in the online environment.

Therefore, the Department of Learning Disabilities and Attention Disorder in the Ministry of Education¹⁴ published in May a document of directives that addresses the emotional and social challenges in distance learning among students with learning disabilities and attention disorders. The document explains the creation of cooperation with their parents and offers pedagogical recommendations in the field of attention deficit disorder, language, reading, writing, arithmetic, synchronously and asynchronously.

Distance Learning in the Kindergarten

All the above statements refer, as aforementioned, to the upper classes and higher education. There are barely any researches on distance learning in the kindergarten, and in general up to a few years ago there was still a strong argument about the integration of technology in learning in the kindergarten. Many research studies aim at indicating its advantages and its integration as a tool in learning, but the experience of synchronous online teaching with parents is new.

Therefore it is possible to infer from research studies that address online learning and use of tablets and Internet in the kindergarten and from researches on distance learning at older ages. Research¹⁵ indicates that there is cognitive learning and even meta-cognitive learning in distance learning and that the use of the Internet for work on the computer or the tablet may have a greater contribution to the development of lingual and mathematical literacy and learning in general, but there is a significant emphasis on the adult who is mediating, since without this adult it is not possible to reach high levels of thinking. The teacher has the role of the personal mentor of the learners through the computer, complementing the computer by giving personal attention¹⁶. The need for mediation is noted in a research¹⁷ on students, which states that the main role of the instructor is en-

¹⁴ Ministry of Education, *The Pedagogical Administration, Senior Department, Psychological Counseling Service, Department of Learning Disabilities and Attention Disorders, When Learning Disability and Attention Disorder Meet Online Distance Learning*, May 2020 [online], <https://meyda.education.gov.il/files/shefi/cherum/corona/Hazara_Lalimudim/Lemida_Mekuvonet_Likuyey_Lemida.pdf> [dostęp: 31.12.2020].

¹⁵ L. Sherry, *Issues in Distance Learning*, "International Journal of Distance Education" 1995, 1, p. 337–365.

¹⁶ Z. Shidlinger, *Hello Teacher: The Computer and the Future of the Education System*, "PC Media" 1999, April, p. 60–61; E. Nir-Gal, P. Klein, *The Use of the Computer in Early Childhood with or without Adult Mediation – The Teacher's Role in the Computerized Environment*, "Pages" 1999, 29, p. 10–76.

¹⁷ A. Goldstein, M. Simka, *YachadNet – A Forum for Online Dialogue among Teachers of Teacher, Nearly 2000*, Mofet Institute & Department for Training Teaching Workers, Ministry of Education, Culture, and Sport, Tel Aviv 1999.

couraging and awakening motivation, helping with technical difficulties, creating contexts, and navigating the learning. In other words, learning and cognitive development is possible even at the high levels of thinking when there is meaningful mediation¹⁸. When we address kindergarten children, the parent becomes a partner in the mediation in learning, and therefore it is necessary to take into account also the parent's ability to mediate and access to the chosen tool. Cohen¹⁹ emphasizes the need for a social framework: some children do not tend to learn individually and distance learning without a social framework is not suited for them. Learning exists through social interaction and is influenced by reciprocal relations²⁰. The reciprocal relationship between the learner and his social environment has decisive impact on the building of knowledge and on the realization of the potential of development²¹.

Distance Learning during Covid-19 around the World

According to UNESCO²² and OECD²³, 186 countries around the world announced in March 2020 the complete closure of education institutions while others announced local closure of education institutions. There are many implications of the closure of education institutions: the disruption of the learning continuum, the dropping out of students from the education system, gaps between the parents in accompanying and carrying out the distance learning, digital gap in the technical level of networks and computers, and gaps in the teachers' level of knowledge, training, and quality of instruction. They call to train and empower teachers around the world in distance learning, with emphasis on the reduction of gaps in the disadvantaged populations.

¹⁸ R. Feuerstein, P. Klein, A. Tannenbaum (eds.), *Mediated Learning Experience: Theoretical, Psychosocial and Learning Implications*, Freund Publishing House, 1991, p. 3–51.

¹⁹ A. Cohen, *Mediated Teaching and Distance Learning through the Internet*, "Computers in Education" 1999, 49, p. 8–16.

²⁰ R. Brandt, *Powerful Learning*, "Education of Thinking" 1998, Winter, 19.

²¹ L. Vygotsky, *Learning in the Social Context: Development of Higher Psychological Processes* (ed. M. Tsellermeir, & A. Kozulin), Hakibbutz Hameuchad, Tel Aviv 2004.

²² UNESCO, *COVID-19 Educational Disruption and Response*, March 29, 2020 [online], <<https://en.unesco.org/covid19/educationresponse>> [dostęp: 31.12.2020]; *Half of World's Student Population Not Attending School: UNESCO Launches Global Coalition to Accelerate Deployment of Remote Learning Solutions*, March 19, 2020 [online], <<https://en.unesco.org/news/half-worlds-student-population-not-attending-school-unesco-launches-global-coalition-accelerate>> [dostęp: 31.12.2020].

²³ A. Schleicher, *How Can Teachers and School Systems Respond to the COVID-19 Pandemic? Some Lessons from TALIS*, OECD Education and Skills Today, March 23rd, 2020, OECD Directorate for Education and Skills, [online], <<https://oecdutoday.com/how-teachers-school-systems-respond-coronavirus-talis/>> [dostęp: 31.12.2020].

In some countries, such as Holland, Finland, and Ireland, as well as a number of states in the United States, the responsibility for the implementation of distance learning is assigned to the school staff, while in other countries, such as China and Britain, the direction is more centralized and led by the state²⁴. According to the World Bank report²⁵, China was prominent in its success with deploying distance learning, opening a national Internet cloud class, from first grade to twelfth grade in every subject. The success is explained in light of the past experience China had acquired in the SARS epidemic in the preparation of digital learning material and because of the existence of digital devices and pedagogical approaches that cultivate memorization and independent learning that could be relatively easily reconstructed online.

Distance Learning during Covid-19 in Israel

In Israel there is a cohesive and orderly concept of distance learning in an emergency due to the security situation. A Director General's Circular²⁶ of the Ministry of Education published in January 2019 addresses online learning in an emergency. In January 2020 the Ministry of Education²⁷ published a procedure for distance learning during an emergency with the aim of providing an answer to different needs in the education system in an online environment. However, this procedure does not address the lack of technological means and socioeconomic gaps²⁸. The procedure refers to the kindergartens: the kindergarten is teacher required to be updated, to update the parents, to calm, and to hold online meetings with parents and children of the kindergarten. Despite the title of the report, it does not address distance learning except for mentioning that it is necessary to hold online meetings. It does not describe distance learning platforms, timing, and time duration.

²⁴ A. Weissblatt, *Distance Learning in a Time of Emergency following the Closure of Education Institutions with the Spread of the Coronavirus: A Comparative Look*, Center of Information and Research of the Israel Knesset, 2020.

²⁵ World Bank, *Remote Learning and COVID-19 – The Use of Educational Technologies at Scale across an Education System as a Result of Massive School Closings in Response to the COVID-19 Pandemic to Enable Distance Education and Online Learning*, March 16, 2020 [online], <<http://documents1.worldbank.org/curated/en/266811584657843186/pdf/Rapid-Response-Briefing-Note-Remote-Learning-and-COVID-19-Outbreak.pdf>> [dostęp: 31.12.2020].

²⁶ Ministry of Education, *Director General's Circular, Emergency Procedure in the Education System*, 2019 [online], <https://apps.education.gov.il/Mankal/horaa.aspx?siduri=218#_Toc256000249> [dostęp: 31.12.2020].

²⁷ Ministry of Education, Administration of Computerization, Technology, and Information Systems, Division of Assimilation of Technologies, *Emergency in Real Time: Procedures and Instructions for Behavior and Distance Learning in an Emergency*, January 2020 [online], <https://meyda.education.gov.il/files/lmida_herum/nohal_cherum_zman_emet_01012020.pdf> [dostęp: 31.12.2020].

²⁸ A. Weissblatt, *Distance Learning...*, op. cit.

On March 13, 2020 the schools in Israel were closed, and on March 15 the kindergartens and special education frameworks were closed. About 2.3 million students from the kindergarten to the high school studied from their homes. On March 14 a letter was sent to the principals about the transition to online learning and the preparation of the Ministry of Education that was filming lessons and activities in studios for all age groups²⁹.

On April 16 a very detailed outline³⁰ for distance learning in the kindergartens was sent, including goals, channels of distance learning, alternatives for the distance learning daily agenda, including links to activities in Hebrew and Arabic, guiding principles for management and implementation of distance learning processes, broadcast schedule, and ideas for extension following the broadcasts. Furthermore, the outline presented an appendix that addresses a safe and supportive kindergarten climate in the online space and an appendix for parents. Messages were sent daily, with updates on materials, broadcast times, enrichment, tools, and online lectures for the kindergarten teachers, in addition to the constellation that supports the instructors and the district supervisors who met on Zoom with the kindergarten teachers and provided guidance.

During the closure of the education institutions, there were frequent changes in the policy of the Ministry of Education. Negotiations were conducted with the teachers' organizations. These changes caused a lack of certainty and awakened difficult public criticism. The topic rose to the public agenda, and there was great doubt regarding distance learning in the kindergarten and the lower grades.

Distance learning deepened the gaps in Israeli society. According to the data of the Central Bureau of Statistics³¹, in about 24% of the households in Israel there is no Internet and in about 15.7% there is no home computer. 21.7% of the Jewish households and about 51% of the Arab households do not have Internet. The prominent gaps are in the Arab sector and the Ultra-Orthodox sector.

In the Ultra-Orthodox sector the gaps derive from economic difficulties, the large families with many children, and the outlook. In many homes there is no connection to Internet and television, and therefore alternative platforms were used, such as email communication and a telephone learning space.

²⁹ Ministry of Education, *Letter to Principals*, March 14, 2020 [online], <<https://bit.ly/2U4hUnu>> [dostep: 31.12.2020].

³⁰ Ministry of Education, *Outline for Distance Learning in the Kindergartens*, April 16, 2020 [online], <https://meyda.education.gov.il/files/mosdot/pre_school_online_learning.pdf> [dostep: 31.12.2020].

³¹ The Central Bureau of Statistics, *Ownership of Entertainment and Communication Products according to Population Group and Peripheral Level of the Residential Community, Society in Israel*, 2017, 11, 2, 124 [online], <https://www.cbs.gov.il/he/publications/doclib/2019/rep_11/part02_h.pdf> [dostep: 31.12.2020].

In Arab society the distress is prominent, especially in the Bedouin communities in the Negev, which are characterized by infrastructure deficiencies. Half of the homes lack computers, and in many cases the parents are not able to help the children, when one reason is that they did not receive training and guidance on the issue. Some of the learning is carried out via WhatsApp, and the parents are required to print out papers and many do not have printers. The teachers' needs were not taken into account; many are parents and need the computer for their children's studies. Central platforms are in the Hebrew language. There is also a gap in teaching and learning on online means on a routine basis relative to Jewish society, and the lack of supervision and technological instruction was visible during Covid-19³².

The research literature and the data of the reports indicate that distance learning obligates different preparation, the kindergarten teacher's role changes, and mastery is required of technology and its adjustment to pedagogy and content.

The present research focuses on the attitudes of kindergarten teachers in Israel towards distance learning during the first wave of the Covid-19 pandemic. The research answers the following question: What are the kindergarten teachers' attitudes towards distance learning? The objective of the research is to know what the kindergarten teachers think about distance learning, what they do on the topic of distance learning, and what they feel about distance learning.

Methodology

The research was conducted in the quantitative research approach and examined a defined and distinct population, kindergarten teachers for ages 3-6, using a questionnaire taken from the research of Jaskulska, Jankowiak, and Rybińska³³. A question was added referring to the platform the kindergarten teacher used during the distance learning. The questionnaire is built from linear differential semantic questions and was created in the attitudes research of Osgood and Tannenbaum³⁴. The starting point in this type of research is theoretical, according to

³² Supreme Follow-Up Committee Report, National Committee for Arab Municipalities, The Coping of Arab Society with the Coronavirus Crisis, Arab Education, 20–25, 2020.

³³ S. Jaskulska, B. Jankowiak, A. Rybińska, *Obraz kształcenia na odległość w Polsce w czasie pandemii COVID-19 w opiniach nauczycielek i nauczycieli wychowania przedszkolnego*, raport [online], <<https://sites.google.com/view/przedszkola-pandemia-raport/>> [dostęp: 31.12.2020]; S. Jaskulska, B. Jankowiak, A. Rybińska, *Postawy nauczycielek i nauczycieli wychowania przedszkolnego wobec kształcenia na odległość w czasie pandemii COVID-19*, "Rocznik Pedagogiczny" 2020, t. 43.

³⁴ C.E. Osgood, P.H. Tannenbaum, *The Principle of Congruity in the Prediction of Attitude Change*, "Psychological Review" 1955, 62 (1), p. 42–55 [online], <<https://doi.org/10.1037/h0048153>> [dostęp: 31.12.2020].

which every question has two poles. In other words, there is a semantic space that includes denotative meaning and broader connotative meaning³⁵. The questions focus on attitudes in the cognitive, behavioral, and emotional fields. There are about four linear questions in each field.

The main research problem was: What are the attitudes of kindergarten teachers in Israel towards distance learning during the first wave of the Covid-19 pandemic, and what factors differentiate them?

The research studied a sample of 213 kindergarten teachers in different kindergartens in Israel. 97.7% are women.

The questionnaire was distributed on WhatsApp using a Google Forms in the week of July 2–15, 2020.

Findings: Distribution of Kindergarten Teachers' Attitudes towards Distance Learning

The kindergarten teachers' answers indicate that their attitudes towards distance learning are moderately positive.

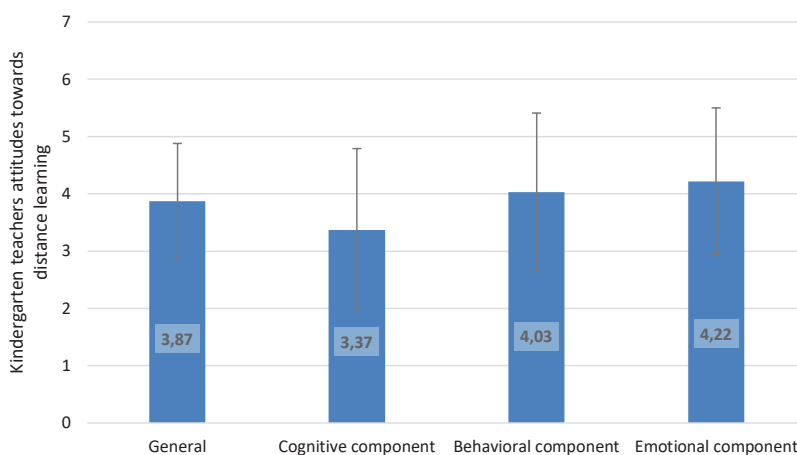


Figure 1: Mean of the Kindergarten Teachers' Attitudes towards Distance Learning in the Four Indices – General, Cognitive, Behavioral, and Emotional

Six significant results were obtained.

A. The attitude towards distance learning is more positive among less senior kindergarten teachers in the general aspect than among senior kindergarten teachers, and the differences are significant ($t(211) = 3.02, p = .004$).

³⁵ D. Heise, *The Semantic Differential and Attitude Research*, [in:] *Attitude Measurement*, ed. G.F. Summers, Rand McNally, Chicago 1970, p. 235–252.

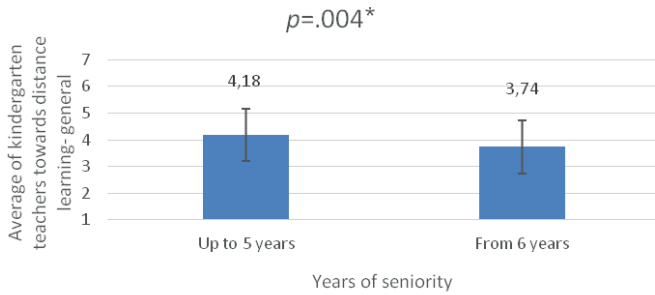


Figure 2: t-Test for Unpaired Samples $t(df = 211) = 2.936, *p < .05$

B. The attitude towards distance learning is more positive among less senior kindergarten teachers than senior kindergarten teachers in the behavioral aspect. The differences are significant ($t(211) = 2.337, p = .020$) (under six years of seniority) ($n = 150$).

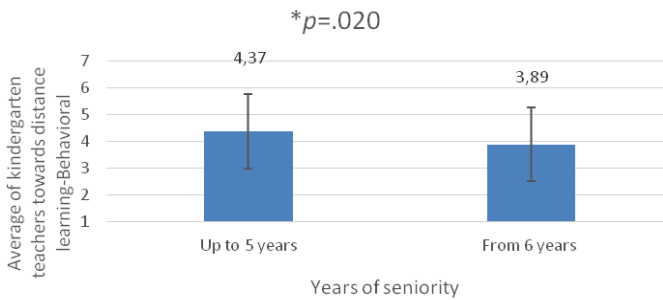


Figure 3: t-Test for Unpaired Samples, $t(211) = 2.337, *p < .05$

C. The attitude towards distance learning is more positive among less senior kindergarten teachers than senior kindergarten teachers in the emotional aspect. The differences are significant ($t(211) = 3.555, p < .001$).

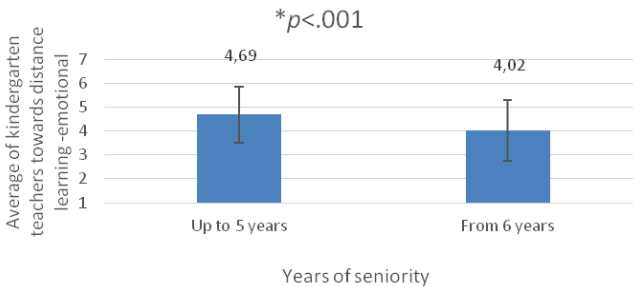


Figure 4: t-Test for Unpaired Samples, $t(211) = 3.555, *p < .001$

D. The attitude towards distance learning is more positive among kindergarten teachers in kindergartens in the Jewish sector than kindergarten teachers in kindergartens in the non-Jewish sector. The differences are significant ($t(211) = 2.141, p = .0033$).

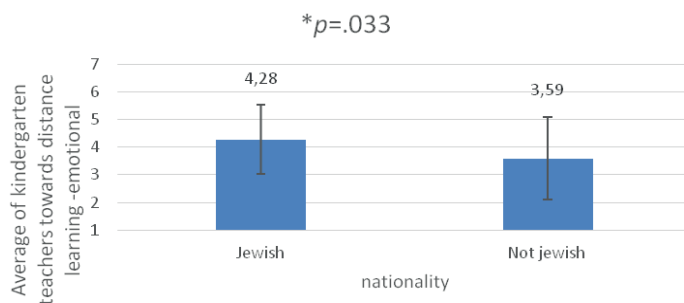


Figure 5: t-Test for Unpaired Samples, $t(211) = 2.141, *p < .05$

E. The attitude towards distance learning is more positive among kindergarten teachers who use WhatsApp as a means of distance learning than kindergarten teachers who do not use it in the general aspect. The differences are significant ($t(211) = 2.265, p = .025$).

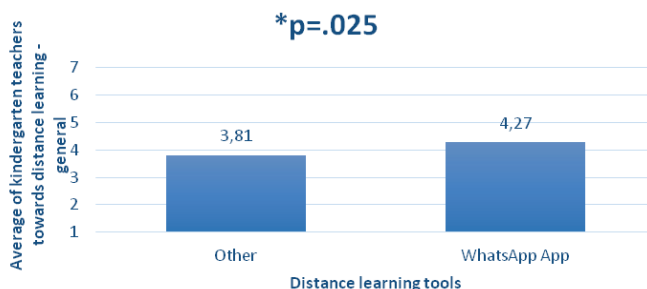


Figure 6: t-Test for Unpaired Samples, $t(211) = 2.265, *p < .05$

F. The attitude towards distance learning is more positive among kindergarten teachers who use email as a means for distance learning than kindergarten teachers who do not use it in the cognitive aspect. The differences are significant ($t(211) = 2.018, p = .045$).

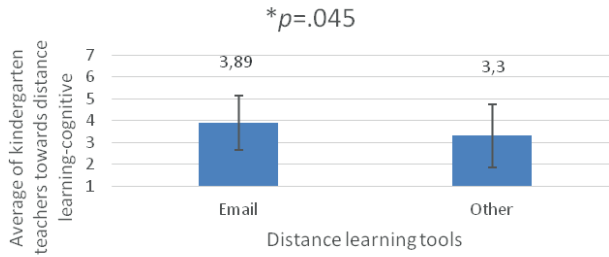


Figure 7: t-Test for Unpaired Samples, $t(211) = 2.018$, $*p < .05$

Discussion

The findings indicate a clear picture that most of the kindergarten teachers, nearly 90%, used the Zoom application. In addition, they extensively used WhatsApp for coordination and announcements. The main research hypothesis is that the kindergarten teachers' attitudes towards distance learning will be in the negative direction. This hypothesis derived from the public response when there was distance learning in the kindergartens and many believed that it was not effective and that it was best to return the work days in the time after the lockdown. This hypothesis was refuted: the findings indicate that the kindergarten teachers' attitude towards distance learning is moderately positive. In the statements on the cognitive component, most of the kindergarten teachers' attitudes were slightly-moderately and moderately. In the statements on the behavioral component, only for one statement were the kindergarten teachers' attitudes moderate. Only about 18.22% of the kindergarten teachers agree greatly and very greatly that distance teaching does not cause them difficulties; in other words, most of them had difficulties. These difficulties were first of all technical – knowing the different platforms – and then the unique mediation tailored to early childhood through the platforms, how to promote and support the different areas of development in the children – motor, emotional, social, and cognitive, and in addition the exposure to the parents who are found in the background. This is new learning of pedagogy and other teaching means, learning through experience forced on them by the circumstances.

The findings further indicate that 19% of the kindergarten teachers do not agree that distance teaching is foreign to them, apparently in light of the fact that the kindergarten teachers used in this way or another way technological elements for the involvement of the home, mainly in the summer vacation. In the statements of the emotional component, most of the kindergarten teachers' attitudes are moderate. These findings indicate the research coherence. In most of the statements above, about 10% agree greatly with the statement, except for the following state-

ments: in distance teaching it is possible to best support the children's physical development (3.7%), in distance teaching it is possible to support the children's social development (4.7%), and distance teaching inspires in me positive emotions (7.1%).

These three statements received the least agreement. Regarding the first statement, the reason is rather clear, although today there is physical activity through Zoom, when dealing with kindergarten children it is complicated. Most of the learning in the kindergarten is accomplished through movement that is integrated into the kindergarten daily agenda, and to do this in distance learning it is necessary to have professional equipment, an open space, and a camera for the entire space, conditions that generally are not found in homes. Movement at this age is a basic necessity for children's normal development. Research studies³⁶ that examine school culture in the context of physical activity at ages four to ten indicates that children need 180 minutes of movement in their daily schedule, of which 60 minutes are sports. A review³⁷ of researches that examined the relationship between physical activity and health showed that the contribution of the physical activity to the physiological, social, and emotional development is essential for normal development. The Ministry of Education in Israel also has recognized the importance and necessity of this topic: the program in physical education in Israel was integrated as a part of the kindergarten teacher's duties in the curriculum for the kindergarten³⁸. The program is learned in the institutions for the training of the kindergarten teachers and in in-service training for kindergarten teachers, both as theory and in practice. Considerable knowledge was collected from written guides and in-service training courses, but there is no knowledge and ideas regarding how to do this in distance learning.

Regarding statement 2, which received only 4.7% agreement, in distance learning it is possible to support the children's social development. The social

³⁶ J.L. Hollis, A.J. Williams, R. Sutherland, E. Campbell, N. Nathan, L. Wolfenden, L., & J. Wiggers, and others, *A Systematic Review and Meta-Analysis of Moderate to Vigorous Physical Activity Levels in Elementary School Physical Education Lessons*, "Preventive Medicine" 2016, 86, p. 34–54; A.R. Cooper, A. Goodman, A.S. Page, L.B. Sherar, D.W. Esliger, E.M. van Sluijs, K. Froberg, and others, *Objectively Measured Physical Activity and Sedentary Time in Youth: The International Children's Accelerometry Database (ICAD)*, "International Journal of Behavioral Nutrition and Physical Activity" 2005, 12 (1), p. 113.

³⁷ I. Janssen, A.G. LeBlanc, *Systematic Review of the Health Benefits of Physical Activity and Fitness in School-Aged Children and Youth*, "International Journal of Behavioral Nutrition and Physical Activity" 2010, 7, p. 40–56.

³⁸ Ministry of Education, *Curriculum in Physical Education for the Kindergarten in State and State Religious Education*, Department for Planning and Development of Curricula of the Ministry of Education, 2007 [online], <<http://cms.education.gov.il/NR/rdonlyres/B5119DBD-07A1-4339-B0A3-057EBC66CAD3/68753/Gan001148new.pdf>> [dostęp: 31.12.2020].

development especially during early childhood obligates dynamics and an interpersonal relationship. The emotional development and social development are intertwined³⁹ and depend on the enrichment of the child's language of emotions. Children are required to initiate a relationship and to create common interest, to be aware of the intentions and emotions of the partner in the relationship, to schedule the activity with another, to know the agreed-upon rules, to deal with their frustration and to regulate emotions, to solve conflicts, and to conduct negotiations in a situation of lack of agreement⁴⁰. It is not possible to advance these abilities through WhatsApp and the transfer of slides, but the question is whether it is possible through synchronous learning via Zoom or Teams. In planned synchronous learning is it possible to cultivate social abilities among kindergarten children? A research⁴¹ conducted in 2007 in Hong Kong examined the influence of the Internet as social support in children aged 8-18 in a time of pressure and found that the Internet may help maintain social relationships and enable a certain degree of social interaction. The degree of influence depends on the nature of the relationship and the platform. Regarding kindergarten children, to attempt to advance social and emotional skills in distance learning it is necessary to choose an appropriate platform and the intentional and focused mediation of the responsible adult, scheduling and thinking and planning of every detail.

The third statement that they least agreed with is distance learning awakens in me positive emotions. Only a few responded very greatly and greatly. This finding indicates that when the teachers do not feel professionalism in the field of distance learning their satisfaction with their work lessens and therefore the positive emotions are not very strong. Researchers⁴² who study teacher satisfaction and commitment to teaching draw a relationship between the desire to realize learning goals and influence on the teachers' satisfaction with their work. To improve the professionalism it is necessary to learn innovative and tailored pedagogy as noted in the review of the literature⁴³. It was found that many of the students in distance

³⁹ A. Fogel, *Developing through Relationships: Origins of Communication, Self, and Culture*, University of Chicago Press, Chicago 1993.

⁴⁰ M. Rosenthal, L. Gat, H. Zur, *The Social and Emotional Life of Little Children*, Chapter 8, "HaKibbutz Hameuchad" 2007, p. 177-185.

⁴¹ L. Leung, *Stressful Life Events, Motives for Internet Use, and Social Support among Digital Kids*, "Cyberpsychology & Behavior" 2007, 10 (2).

⁴² R. Bogler, *Satisfaction of Jewish and Arab Teachers in Israel*, "Journal of Social Psychology", 2005, p. 19-33; Y. Oplatka, *Foundations of the Administration of Education*, Pardes, Haifa 2015; A. Shatz-Oppenheimer, D. Meskit, S. Zilberstrom, *To be a Teacher*, Mofet Institute & Ministry of Education, Tel Aviv 2011, p. 161-180.

⁴³ A. Chickering, S. Ehrmann, *Implementing the Seven Principles: Technology as Lever*, 1998 [online], <<http://www.tlgroup.org/programs/seven>> [dostęp: 31.12.2020]; S. Keren, G. Kurtz, *Face-to-Face versus Online Synchronous Teaching: Attitudes of Practiced Teachers*, Holon Techno-

learning transfer the previous didactic models developed in traditional learning to the Internet space. There is a need to learn and adjust the technological platform and didactics of early childhood, to examine the adjustment of the different instruments, and to know up-to-date and interesting interactive solutions.

The next finding can provide an answer to this. The hypothesis that seniority will have influence (number 2) was confirmed (see Figures Number 2, 3, 4). The attitude relative to the distance learning is more positive among less senior kindergarten teachers in comparison to senior kindergarten teachers. The differences are significant in three measures – general, behavioral, and emotional. This finding indicates that the technical access of young people to digital media is higher and the current process of training includes technology courses and online courses. The young kindergarten teacher has experience in distance learning, and it is possible that this has an influence. The young kindergarten teachers can support the senior ones. In addition, we do not see a significant difference in the cognitive aspect between the groups. There is slight moderate to very high agreement in the two populations without differentiation of the seniority. 82.5% of the respondents maintain that it is possible to support the cognitive development of children in distance learning, in other words this is their feeling after they have experienced this. This finding is commensurate with the research literature, which notes that from school through higher education it has been proved that students learned and acquired knowledge⁴⁴.

Regarding the additional demographic variables, such as level religiosity, kindergarten teacher role, age stage, and place of residence, significant differences were not found and the hypotheses were refuted.

The hypothesis that differences would be found regarding distance learning in the context of the platform used was confirmed and was expressed in findings that strengthen one another: the general attitude regarding distance learning is more positive among kindergarten teachers who use WhatsApp as a means of distance learning in comparison to kindergarten teachers who do not use WhatsApp as a means of distance learning. The differences are significant ($t(211) = 2.265$, $p = 0.25$). The second finding is that the attitude regarding distance learning is more positive among the kindergarten teachers who use email as a means of distance learning in comparison to kindergarten teachers who do not use email as a means of distance learning. The differences are significant ($t(211) = 2.018$, $p = .045$). While on Zoom $n = 188$ and on WhatsApp $n = 185$, on email $n = 27$, or in other words most of the 213 respondents used Zoom and WhatsApp as sup-

logical Institute, 2020 [online], <https://www.openu.ac.il/lists/mediaserver_documents/innovation/chais/2020/b1_2.pdf> [dostęp: 31.12.2020].

⁴⁴ L. Sherry, *Issues in Distance...*, op. cit., p. 337–365.

port and addition to Zoom and only 27 used email as an addition. When email constituted an addition to Zoom, apparently files were sent before the activity or afterwards, the learning was more meaningful, and therefore the satisfaction in the cognitive aspect is higher. These findings are commensurate in the context of theories how children learn mainly in early childhood: as in the review of the literature⁴⁵, repetition and experience are required to create meaningful learning. Therefore, a kindergarten teacher who accompanied the learning on Zoom with files sent on WhatsApp, by sending products and games she built for implementing the learning created relations between the learning in the group done together and tried to create a virtual environment like what is done in the kindergarten. Therefore the findings in the cognitive aspect are higher in this issue.

CONCLUSIONS

Distance learning is challenging and requires the learner to have discipline and skills of independent learning, high digital literacy, and cognitive and emotional skills different from those used in face-to-face learning. Regarding kindergarten children, the kindergarten teacher must be aware of her role as mediator. This research indicates that the decisive majority of the kindergarten teachers held distance learning and that their attitude towards it is moderately positive. However, it is possible to improve the manner of activity and thus the kindergarten teachers' attitude towards distance learning.

One of the prominent findings, as aforementioned, is related to seniority. The younger kindergarten teachers with up to six years of seniority deal better with distance learning than do the more senior kindergarten teachers. This is an internal resource that can be utilized, and like the senior kindergarten teachers are recruited to train and lead the younger kindergarten teachers, now it is possible to do the reverse. In every cluster of kindergartens there are younger kindergarten teachers who can contribute from their knowledge and experience on this topic. In general, it is important to equip everybody with the tools that support distance learning, so that it will be as meaningful as possible in the kindergarten, such as sending files, games, and applications through which it is possible to go back and practice what is learned. It is important for the kindergarten teachers to understand the meaning of the online environment and not to focus only on activity. Sending aids via regular mail can help the learning and enable practice with tangible aids at home during the instruction on Zoom. Regarding the motor field, in early childhood it is necessary to prepare a program ahead of time for these situations on how it is pos-

⁴⁵ R. Brandt, *Powerful Learning...*, op. cit.

sible to support in the best possible way this topic among kindergarten children in distance learning. A program available for use in these situations is accompanied by films and photograms, illustrations that can serve children also when there is no camera filming the entire room, as well as to build a virtual community that supports and collects ways of teaching integrating movement on Zoom. Regarding the children's social development, the tendency in distance learning is to focus on contents and on cognitive learning and therefore the kindergarten teachers feel more confident in this field. It is necessary to create programs adjusted to the promotion of the social facet from a distance and to seek the advice of psychologists in building them. Activity in small groups will enable conversation with the activity and attention to interaction with social emphases.

The gap between the sectors necessitates the handling by the authorities, handling of the resources, and massive instruction on the topic of shared learning communities of both sectors. Sharing tools and knowledge can occur voluntarily with a guiding hand. It is important to note that this research did not examine the topic from the parents' perspective. It is necessary to take into account that at this age their great involvement is a part of the learning process, and therefore it is possible to conclude about the manner of distance learning and its effectiveness.

CONCLUSIONS

This research examined the cognitive, behavioral, and emotional aspects of the kindergarten teachers regarding distance learning. The main conclusion is that for there to be coherence between these fields it is necessary to invest in knowledge and to strengthen it as much as possible. In other words, when the level of knowledge increases, the kindergarten teachers will better implement distance learning when needed and will feel better with what they are doing. There is no doubt that the computer or cellular device cannot constitute a substitute for a professional kindergarten teacher who is available and provides meaningful mediation in the kindergarten, which is mediation for verbal and emotional meaning through movement and guided activity. The virtual space cannot take the place of the kindergarten space, which is tailored to the children's age and enables a tangible and real experience. Nevertheless, we are required to be prepared for extreme situations.

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Summary

The coronavirus pandemic has forced the world to deal with distance learning. This article discusses distance learning in the kindergartens in Israel from the perspective of kindergarten teachers. The research was carried out after the first wave of the virus, in March 2020, and its problems was: What is the attitude of the kindergarten teachers in Israel to distance learning? The research used a linear (differential semantic) questionnaire that measures the degree to which they agree with statements related to distance learning in the cognitive, behavioral, and emotional aspects. The questionnaire was filled out by 213 kindergarten teachers. The research attempts to conclude about the kindergarten teachers' perception of distance learning.